

ABSTRACT OF THE DISCLOSURE

A projection system including a light source, a polarization conversion system, a reflection mirror, a color separator, a scrolling unit, a light valve, and a projection lens unit is provided. The polarization conversion system includes an incidence plane through which light emitted from the light source enters, and transmits a beam with a first polarization from the light entering through the incidence plane and reflects a beam with a second polarization toward the incidence plane and then changes the polarization of the reflected beam. The reflection mirror reflects the light emitted from the polarization conversion system through the incidence plane back toward the incidence plane. The color separator separates an incident beam according to color. The scrolling unit scrolls the color beams. The light valve processes an incident beam according to an image signal and forms a color picture. The projection lens unit magnifies and projects the color picture onto a screen.